

Birla Institute of Technology & Science Pilani, Rajasthan

B.E. (Hons.) Manufacturing

Semester wise pattern for students admitted to First degree program - B.E. (Hons.) Manufacturing :

Year	First Semester	Second Semester
1	General Biology Chemistry I <b>Thermodynamics</b> Mathematics I Physics I <b>Engineering Graphics</b>	Probability and Statistics Chemistry II Mathematics II Physics II <b>Workshop Practice</b> Computer Programming I
2	Electrical Sciences I  Mathematics III Computer Programming II <b>Mechanics of Solids</b> Measurement Techniques I Technical Report Writing	<b>Structure and Properties of Materials</b> Electrical Sciences II Principles of Management <b>Measurement Techniques II</b> <b>Transport Phenomenon I</b> <b>Applied Thermodynamics</b>
Summer	Practice School I	
3	<b>Design of Machine Elements</b> <b>Kinetics and Dynamics of Machines</b> <b>Metal forming and Machining</b> <b>Manufacturing Management</b> Optimization Numerical Analysis	<b>Computer Aided Design</b> <b>Mechatronics &amp; Automation</b> <b>Tool and Fixture Design</b> <b>Casting and Welding</b> Operations Research Control Systems
4	Six Elective Courses	Practice School II or Dissertation

Elective Courses Offered :

Instrumentation Control, Design of Machine tools, Mechanical Engineering Drawing, Maintenance and Safety, Automotive Systems, Mechanical Vibration & Acoustics, Manufacturing Excellence, Noise Engineering, Work System Design, Internal Combustion Engines, Lean Manufacturing, Supply Chain Management, Quality control Assurance and Reliability, Advances in Material Sciences, Industrial Relations, Precision Engineering, Product Design and Development, Product Design and Development Projects, Computer Aided Manufacturing.